

ABSTRACT

An exposure apparatus having an illumination system which applies an exposure energy beam to a mask on which a pattern for transfer is formed, and a stage system for positioning a substrate to which the pattern of the mask is transferred, is characterized in that: a gas supply apparatus for supplying a gas of a high transmittivity with respect to the exposure energy beam, and having good thermal conductivity, to at least a portion of an optical path of the exposure energy beam, and a gas recovery apparatus for recovering at least a portion of the gas after the gas is supplied to the optical path of the exposure energy beam from the gas supply apparatus, are provided.